

## **Code of Practice for the Care of Amphibians Pet Retail Stores**

The New Brunswick Society for the Prevention of Cruelty to Animals wishes to acknowledge the Australian Capital Territory's publication *Code of Practice for the Welfare of Amphibians in Captivity* in the preparation of this code of practice

### **Handling**

Handling of a captive amphibian must always be minimized to ensure the amphibian is not stressed or accidentally injured.

Care should be exercised when handling to prevent injury and discomfort to the animal. The animal's abdomen should be supported by the palm of the hand with the other hand placed over its shoulders to prevent escape. Amphibians should be held securely, but not tightly, as their bones are fragile.

Standard hygiene procedures such as hand washing should be followed. It is imperative to ensure that hands are thoroughly rinsed and no detergent remains before handling further amphibians.

When introducing new animals, or handling sick animals, it is recommended to use disposable latex gloves. The gloves should be wet prior to handling the amphibian in order to protect the amphibian's sensitive skin. Gloves should be changed when handling animals housed in different tanks to prevent any possibility of cross-contamination.

### **Quarantine**

It is recommended that any new rock, soil, or gravel material be thoroughly dried before introduction to the tank to reduce the risk of introducing a disease. This can be achieved by either drying the material in direct sunlight until no moisture remains, or heating the material for period of 2 – 3 hours in a slow oven. For either method, the soil or gravel should be regularly stirred and turned to ensure no pockets of moisture remain. .

### **Environment**

An amphibian enclosure, shall protect amphibians from: vermin and other animals; escape; direct sunlight; air born contaminants such as aerosol sprays, smoke, vapours and fumes; chemicals such as cleaning products; extremes of temperature; excessive noise; and young children and rough or excessive handling.

### **Housing**

The needs of each individual species must be taken into account when establishing the holding tank or other enclosure.

Enclosures for captive amphibians: must be constructed of material that is easy to clean; be easily accessible to the handler for maintenance; have adequate space for the given individuals to move and exercise; and be well ventilated.

Amphibians may be kept in a variety of situations, but whatever is chosen, care must be taken to ensure that the enclosure: is not placed in direct sunlight; provides continuous access to water; provides generous ventilation and is safe from fumes and vapours (chemicals including insecticides, ammonia

from urine, deodorants and hairsprays); is safe for the occupants i.e. has no sharp projections or structures that may easily collapse; and provides opportunities for sufficient exercise.

### Burrowing Frogs

A burrowing frog's enclosure should be established with a greater floor space than height. The depth of soil used will depend upon the species of frog being kept and allowance for the depth of the soil should be taken into account when selecting the tank.

The type of soil is important and depends on the species of burrowing frog being kept. Informed advice should be sought on the sand or clay content required.

The amount of time a burrowing frog stays within its burrow will vary between species. Some burrowing frogs will burrow daily, returning to the surface at night. Other burrowing frogs only burrow during droughts. If the latter species is kept, further information should be sought on how long the individual frog can stay in a state of torpor (a hibernation-like state) and what environmental triggers they need to allow them to return to the surface.

Do not set up the enclosure for a burrowing frog with soil only. Rocks, water and plants should also be included.

### Tree Frogs

A tree frog's enclosure should have more height relative to volume to allow for climbing. Tree frogs need to have their size and weight taken into account when furnishing their enclosure with plants. A large tree frog will require suitably sized climbing structures.

Frogs are not to be given roses, or other plants with thorns, spines or sharp edges to climb on. Frogs have soft sensitive skin and thorns will penetrate their skin. Artificial plants may be used within the enclosure.

Tree frogs benefit from having a lot of branches within their enclosure for climbing as well as an abundance of fresh green leafed plants for hiding in.

A wooden framed tight-fitting lid with an insert of plastic mesh, secured to the top of the tank with latches is recommended for the enclosure. Tree frogs can be strong enough to push a glass lid off their tank and escape. Lids must be tight fitting or secured or frogs will escape.

### Stream dwelling frogs

Stream dwelling frogs should be kept in an enclosure that has free flowing water which is pumped from one end to the other. This can be set up as a cyclic system.

The enclosure should have varying sizes of rocks to allow frogs to hide. Care should be taken with the positioning of the rocks to ensure that the rocks cannot collapse and trap or injure the frog. Plants should also be included within this environment.

## **Lighting**

Because of a frog's sensitivity to light and the role ultra violet radiation plays in its behaviour it is recommended that light be artificially provided by means of a fluorescent light fitting on a timer. (Household light bulbs do not produce the correct wave lengths).

All amphibians require a "normal" day / night cycle (12 hours of light in the warmer months with an option of 8 hours a day in winter).

An essential vitamin, (Vitamin D), is produced in the skin when exposed to ultraviolet rays in sunlight. Due to the dangers of allowing direct sunlight onto an enclosure and the filtering effect of glass it is necessary to use special "reptile" Ultra Violet fluorescent light tubes as part of the day cycle. Exercise caution and seek professional advice when purchasing UV lights as some are dangerously strong; and do not produce the correct wavelengths.

## **Temperature**

**Individual species of amphibians must be provided with their particular temperature requirements.**

Tropical species should be kept at a temperature of at least 20 degrees Celsius and semi tropical species should be kept at a temperature of at least 15 degrees Celsius

One or a combination of the following may achieve artificial heating: Ambient temperature, (heating the room in which the enclosure is placed keeping in mind that the temperature should remain constant). "Reptile" heat pad placed under or behind the enclosure. Aquarium water heater placed in a water section. This will also increase humidity. Radiant heat source—spot or "heat lamp". These sources of heat will require a protective cage to prevent frogs from burning themselves. Spot-lights will need to be infra red to maintain a day/night cycle.

It is highly recommended that a thermostat is attached to any of the previous heating appliances to maintain a constant temperature and that a thermometer is used for monitoring.

## **Humidity**

Tropical species of frogs should be maintained at 60% to 80% humidity. Semi-tropical species of frogs should be kept at 50% to 70% humidity. Cooler climate frogs can be maintained at 30% to 60% humidity.

## **Water**

All amphibians require free access to water to survive. The water must be: Deep enough to submerge their hind legs as this is how a frog drinks; Clean and free of ammonia. (small bodies of water will need to be changed daily, larger bodies of water can be filtered); Free of chlorine (water can be aged or dechlorination agents added); and Easy to find and access.

The amphibian must have the ability to get out of deep bodies of water by providing such aids as aquatic plants or partially submerged objects. Amphibians can drown if they are unable to get out of the water or when their feet are too wet to adhere to surfaces.

**Substrate**

Any material used on the bottom of the enclosure will need to be: easy to clean; free of bacteria; large enough to not be swallowed and cause constipation; and non-adherent.

**Cleaning**

Small standing bodies of water need to be changed daily. Water filters require changing as per the manufacturer's advice.

**Nutrition**Tadpoles

A tadpole will feed on decaying plant matter, algae, spirulina and fish flakes. Decaying plant matter can be provided for tadpoles. This can be provided by boiling lettuce for 5 minutes and allowing it to cool before introducing it to tadpoles. The boiled lettuce can be stored in ice cube trays in the freezer and added, once defrosted, to the tank housing the tadpoles when required. This should be approximately every 1 to 3 days. Overfeeding leads to very dirty water. Underfeeding tadpoles can lead to cannibalism.

Water should be left to stand for a 24 hour period, or a chemical ager should be introduced to the water to quickly eradicate other chemicals such as fluoride

Frogs

Frogs are insectivorous (eat insects) and hunt by movement. When offering food it must be alive or physically jiggled about by hand.

Frogs species have distinctive feeding behaviours. Some species will gorge themselves on any available tasty morsels regardless of need, while others will only eat occasionally when hungry.

Frogs survive well on a diet that includes crickets, mealworms, waxworms, bloodworms and grasshoppers. Mealworms and waxworms should only form a minor part of the diet because they have a very high fat content.

A frog should be given a variety of insects of varying sizes within their diet. Generally, most frogs will eat all sorts of insects. If the frog is large enough, start by feeding it crickets then introduce other insects of a similar size.

Frogs in particular require additives for healthy growth. When supplementing a frogs diet with vitamin supplements or additives such as calcium the manufacturer's directions must be followed.